UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,784	08/24/2001	Brian D. Ryder	COMP:0235	2946

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EXAMINER
CHUNG, DANIEL J

ART UNIT	PAPER NUMBER
2672	

DATE MAILED: 09/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/938,784	RYDER, BRIAN D.
	Examiner	Art Unit	
	Daniel J Chung	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____ .

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2* .	6) ☐ Other: .

U.S. Patent and Trademark Office

PTOL-326 (Rev. 04-01)   Office Action Summary   Part of Paper No. 3

DETAILED ACTION

Information Disclosure Statement

Receipt is acknowledged of Applicant's Information Disclosure Statement of 1-7-

2002, which has been placed in the application file and considered by the Examiner.

Drawings

The drawings are not objected to by the Examiner.

Specification

Please review the application and correct all informalities.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Holehan (6,337,918) in view of Senior (6,400,836).

Regarding claim 1, Holehan discloses that the claimed feature of a user input

device comprising: a fingerprint scanner [i.e. "CCD sensor"; 24]; and a driver [i.e.

"touchpad controller"; 56] operably coupled to the fingerprint scanner to enable the

fingerprint scanner to perform a function, wherein the function comprises at least one of

a scroll function ["control the position of cursor"], a zoom function, a hot-key function,

and a select function. (See Fig 3, col 1 line 61-col 2 line 14, col 2 line 48-67, col 4 line

23-40)

Holehan does not specifically discloses that performing the function comprises

one of a scrolling, zooming, and selecting function. (although "controlling the position of

cursor" of Holehan could be considered as "a scroll function" of recited claim) However,

such limitation is shown in the teaching of Senior. [i.e. "allowing the user to control a

variety of functions..." in Abstract line 7-11 of Senior] (See Abstract, col 1 line 66-col 3

line 7, col 3 line 34-44, col 5 line 27-30, col 6 line 55-col 7 line 16) It would have been

obvious to one skilled in the art to incorporate the teaching of Senior into the teaching of

Holehan, in order to provide "incorporating the pointing device functionality allows the

fingerprint to be passively acquired, without requiring repeated explicit authentication

which could take time and interrupt work flow" (See col 2 line 22-25 of Senior), as such

improvement is also advantageously desirable in the teaching of Holehan for providing

fingerprint security system with multi-functional touchpad operations.

Regarding claim 2, Holehan discloses that the fingerprint scanner comprises a

CCD array [24]. (See Fig 3)

Regarding claim 3, Holehan discloses that the driver is operable to configure a computer associated with the fingerprint scanner to switch between a security mode ["security system"] and the function ["cursor control"]. (See Abstract, Fig 4, col 2 line 15-37)

Regarding claim 4, Holehan discloses that the software driver configures the computer to operate in a security mode while simultaneously performing at least one of a scroll function, a zoom function, a hot-key function, and a select function. (See Abstract, Fig 4, col 2 line 15-37)

Regarding claim 5, Holehan discloses that the fingerprint scanner is disposed on a PCMCIA card [34]. (See Fig 3)

Regarding claim 6, Holehan discloses that the fingerprint scanner comprises a USB interface. (See Fig 3)

Regarding claim 7, Holehan discloses that the fingerprint scanner is disposed on a mouse. (See col 4 line 50-53)

Regarding claim 8, Holehan discloses that the fingerprint scanner is disposed on a dumb terminal. (See col 4 line 50-53)

Regarding claim 9, refer to the discussion for the claim 1 hereinabove, Holehan discloses that the claimed feature of a computer system comprising: a processor [26]; a fingerprint scanner operably coupled to the processor; and a driver to configure the fingerprint scanner to perform at least one of a scroll function, a zoom function, a hot-key function, and a select function on the computer. (See Fig 3, col 1 line 61-col 2 line 14, col 2 line 48-67, col 4 line 23-40)

Regarding claim 10, Holehan discloses that the processor is disposed on a CPU [26]. (See Fig 3)

Regarding claim 11, Holehan discloses that a first bridge unit [32] coupled to the CPU [26]; and an first expansion bus [35] coupled to the first bridge unit. (See Fig 3)

Regarding claim 12, Holehan discloses that the fingerprint scanner [24] is coupled to the first expansion bus [35]. (See Fig 3)

Regarding claim 13, Holehan discloses that a second bridge unit [38] coupled to the first expansion bus [35]; and a plurality of secondary expansion busses coupled to the second bridge unit. (See Fig 3)

Regarding claim 14, Holehan discloses that the fingerprint scanner is disposed on at least one of the plurality of secondary expansion buses [40]. (See Fig 3)

Regarding claim 15, Holehan discloses that a display coupled to the first bridge

unit. (See Fig 1, Fig 3)

Regarding claim 16, Holehan discloses that the computer system is coupled for a

network having a plurality of devices coupled thereto. (See Fig 1, Fig 3)

Regarding claim 17, refer to the discussion for claim 1 hereinabove, Holehan

discloses that the claimed feature of a method of operating a fingerprint scanner

comprising the acts of: (a) configuring a computer to perform at least one of a scroll

function, a zoom function, a hot-key function, and a select function in response to

signals generated by the fingerprint scanner; and (b) generating signals based on input

to the fingerprint scanner wherein the input to the fingerprint scanner comprises at least

one of a unique image and motion. (See Fig 3, col 1 line 61-col 2 line 14, col 2 line 48-

67, col 4 line 23-40)

Regarding claim 18, Holehan discloses that monitoring the computer system to

determine if a need arises to configure the computer for security mode; and configuring

the computer for security mode when the need arises. (See Abstract, Fig 4, col 2 line

15-37)

Regarding claim 19, refer to the discussion for the claim 1 hereinabove, Senior further discloses that the act of pressing an alternate select key to configure the computer to perform at least one of the scroll function, a zoom function, a hot-key function and a select function. (See col 3 line 34-44, col 6 line 55-67, col 7 line 5-16)

Regarding claim 20, refer to the discussion for the claim 1 hereinabove, Senior further discloses that the act of tapping the fingerprint reader to configure the computer to perform at least one of the scroll function, a zoom function, a hot-key function and a select function. (See col 3 line 34-44, col 6 line 55-67, col 7 line 5-16)

Regarding claim 21, refer to the discussion for the claim 1 hereinabove, Senior further discloses that the act recognizing an acquired fingerprint as corresponding to the appropriate function to configure the computer to perform at least one of the scroll function, a zoom function, a hot-key function and a select function. (See col 3 line 34-44, col 6 line 55-67, col 7 line 5-16)

Regarding claim 22, refer to the discussion for the claim 1 hereinabove, Holehan discloses that the claimed feature of a method of manufacturing a computer system comprising the acts of: (a) providing a fingerprint scanner; (b) providing a processor; (c) operably coupling the fingerprint scanner to the processor; and (d) providing software that configures the processor to interpret signals from the fingerprint scanner as one of

a scroll function, a zoom function, a hot-key function, and a select function. (See Fig 3, col 1 line 61-col 2 line 14, col 2 line 48-67, col 4 line 23-40)

Regarding claim 23, refer to the discussion for the claim 1 hereinabove, Holehan discloses that the claimed feature of method a method of using a fingerprint scanner configurable to control one of a scroll function, a zoom function, a hot-key function, and a select function, the method comprising the act of: moving a finger on the fingerprint scanner to cause the one of a scroll function, a zoom function, a hot-key function, and a select function. (See Fig 3, col 1 line 61-col 2 line 14, col 2 line 48-67, col 4 line 23-40)

Regarding claim 24, refer to the discussion for the claim 1 hereinabove, Senior further discloses that the act of pressing an alternate select key while simultaneously placing a finger on the fingerprint scanner. (See col 3 line 34-44, col 6 line 55-67, col 7 line 5-16)

Regarding claim 25, refer to the discussion for the claim 1 hereinabove, Senior further discloses that the act of tapping a finger on the fingerprint scanner. (See col 3 line 34-44, col 6 line 55-67, col 7 line 5-16)

Regarding claim 26, refer to the discussion for the claim 1 hereinabove, Holehan discloses that the claimed feature of a computer system comprising: means for configuring a computer to perform at least one of a scroll function, a zoom function, a

hot-key function, and a select function in response to signals generated by the

fingerprint scanner; and means for generating signals based on input to the fingerprint

scanner wherein the input to the fingerprint scanner comprises at least one of a unique

image and motion. (See Fig 3, col 1 line 61-col 2 line 14, col 2 line 48-67, col 4 line 23-

40)

Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Holehan (6,337,918) in view of Brownlee (6,282,303).

Regarding claim 27, Holehan discloses that the claimed feature of a method of

acquiring finger movement velocity and direction information, the method comprising the

acts of: (a) acquiring a first digital image of a fingerprint; (b) acquiring a second digital

image of a fingerprint at a specific time after acquiring the first digital image; and (c)

comparing the first and second digital images for differences to calculate velocity and

direction between the first and second digital images. (See Fig 3, col 1 line 61-col 2 line

14, col 2 line 48-67, col 4 line 23-40)

Holehan does not explicitly disclose that calculating finger movement velocity

and direction information. However, such limitation is shown in the teaching of

Brownlee. (See col 1 line 33-37, col 3 line 43-46, col 4 line 66-col 5 line 12) it would

have been obvious to one skilled in the art to incorporate the teaching of Brownlee into

the teaching of Holehan, in order to detect/track the image of the fingerprint properly, as

such improvement is also advantageously desirable in the teaching of Holehan for

controlling the position of cursor effectively

Regarding claim 28, Holehan discloses that the act (c) is performed by a

computer system coupled to a fingerprint reader. (See Fig 1, Fig 3)

Regarding claim 29, Holehan discloses that the act (c) is performed by firmware

disposed in a fingerprint reader. (See Fig 1, Fig 3)

Regarding claim 30, refer to the discussion for the claim 27 hereinabove,

Holehan discloses that the claimed feature of an input device comprising: a fingerprint

reader; and a unit coupled to the fingerprint reader adapted to calculate velocity and

direction based on movement of an object on the fingerprint reader. (See Fig 3, col 1

line 61-col 2 line 14, col 2 line 48-67, col 4 line 23-40)

Regarding claim 31, Holehan discloses that the unit coupled to the fingerprint

reader comprises firmware disposed in the fingerprint reader. (See Fig 1, Fig 3)

Regarding claim 32, Holehan disclose that the unit coupled to the fingerprint

reader comprises a processor configured by a software driver. (See Fig 1, Fig 3)

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Any inquiry concerning this communication or earlier

communications from the examiner should be directed to Daniel J. Chung whose

telephone number is (703) 306-3419. He can normally be reached Monday-Thursday

and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by

telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be

reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Technology Center 2600 Customer Service Office

whose telephone number is (703) 306-0377.

djc
September 6, 2003
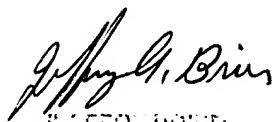
JEFFERY BRIEN
PRIMARY EXAMINER